REMARKS

The Examiner is thanked for the due consideration given the application. The specification has been amended to insert headings. A substitute abstract has been provided.

Claims 1-18 are pending in the application. Claim 17 has been withdrawn from consideration. Claim 1 has been amended to better set forth the invention being claimed. Claim 18 is new and recites subject matter canceled from claim 14. Claims 2-13, 16 and 17 have been amended to improve their language in a non-narrowing fashion.

No new matter is believed to be added to the application by this amendment.

Election/Restriction

Claim 17 has been withdrawn from consideration. It is noted that claim 17 depends upon claim 1. Rejoinder of claim 17 is accordingly respectfully requested upon indication of allowability of claim 1 as requiring no undue burden.

Rejection Under 35 USC §112, Second Paragraph

Claim 14 has been rejected under 335 USC §112, second paragraph as being indefinite. This rejection is respectfully traversed.

The Official Action asserts that claim 14 sets forth a wide range encompassing a narrow range. The comments in the Official Action have been considered, and claim 14 has been amended to remove one of the ranges to be recited in newly presented claim 18.

Claim 14 is thus clear, definite and has full antecedent basis.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejection Over NIEBYLSKI

Claims 1-16 have been rejected under 35 USC §103(a) as being unpatentable over NIEBYLSKI. This rejection is respectfully traversed.

The present invention pertains to a method allowing the removal of metals in ionic form in solution in water or aqueous effluents. This method aims at the elimination of these metal ions in the aqueous effluents from industry and for the treatment of water for human consumption. It is noted that legislation is very strict with regard to the content of metals in various aqueous effluents produced by industry and in water supply networks. For example, in Europe (in the United States, the values may differ but United States legislation is also very strict), the contents tolerated in aqueous industrial

waste products are at sub ppm levels. In drinking water, this content has to be less than 50 ppb (parts per billion by weight) for lead or chromium, 5 ppb for cadmium and less than 1 ppb for mercury.

Claim 1 of the present invention has been amended to recite:

1. A method for reducing the content of contaminating metals in ionic form present in aqueous effluents, comprising:

a) providing an aqueous effluent comprising at least a metal M_i in ionic form;

b) placing the aqueous effluent in contact with at least a metal M_h completely or partially covered with hydrogen before and/or during the placing in contact with the metal ion(s) M_i; and

c) recovering an aqueous effluent from which metal M_i has been eliminated or its content reduced.

The present invention is thus clearly a method to eliminate or reduce the content of a contaminating metal in an effluent. That is to say, the metal is present in an aqueous media in which it is preferable that the metal not be present, for example, for health reasons if the effluent is water for human consumption.

The concept of effluent further corresponds to any aqueous medium coming from industry and which has to be treated to eliminate contaminants before reusing the water or the media. It also corresponds to water for human consumption, and the elimination or content reduction in some metals has to be operated on natural, industrial or any other reused water.

That is to say the words "contaminating" and "effluent" are important aspects of the claimed method. Included in the meaning of effluent treatment is that it is operated at an enormous level (volume of water or other effluents) to be treated, not at the level of a laboratory or at the level of catalyst production. These characteristics and the recitation of claim 1's step a) of providing such an effluent have to be considered in assessing patentability.

NIEBYLSKI relates to a method of depositing a noble metal on a surface of a nickel support.

First, NIEBYLSKI does not relate at all on a decontamination method wherein a contaminating metal has to be eliminated from an aqueous effluent.

Second, there is no effluent in NIEBYLSKI, only a media containing the metal. This media is specifically

prepared to provide the metal in the process. This is not an effluent.

For example the Merriam-Webster Online Dictionary defies "effluent" as: "something that flows out: as a: an outflowing branch of a main stream or lake b: waste material (as smoke, liquid industrial refuse, or sewage) discharged into the environment especially when serving as a pollutant." See http://www.merriam-webster.com/dictionary/effluent[2].

Therefore, NIEBYLSKI fails to disclose the following features (highlighted):

1. ***A method for reducing the content of contaminating metals*** in ionic form present in ***aqueous effluents***, comprising:

a) ***providing an aqueous effluent comprising at least a metal M_i in ionic form***;

b) placing the ***aqueous effluent*** in contact with at least a metal M_h completely or partially covered with hydrogen before and/or during the placing in contact with the metal ion(s) M_i; and

c) ***recovering an aqueous effluent from which metal M_i has been eliminated or its content reduced***.

NIEBYLSKI is thus clearly fundamentally different from the present invention. It does not pertain to the same technical field. There is no reason:

(1) to the person skilled in the art to turn to NIEBYLSKI to try to solve the technical problem at the basis of the invention. The reasoning in the Official Action is evidently an *ex-post facto* analysis that is not permissible for fulfilling the unpatentability requirement; and

(2) there is no information in NIEBYLSKI that would cause the person skilled in the art to utilize any of the teachings of the method for depositing noble metals on a nickel surface on a technology of effluent metal decontamination. Besides, there is a fundamental difference between a special media containing an added noble metal, which composition is known and hand-made, and an effluent the composition of which may be complex and variable.

Also, the process taught by NIEBYLSKI is a controlled method in the laboratory or production plant with limited volumes, whereas the present invention has to be applied to vast volumes of effluents.

Simply, the method disclosed in NIEBYLSKI would not have attracted the attention of a person skilled in the

art faced to the underlying technical problem of decontaminating aqueous effluents including water, and would not have been considered by this person as a possible solution to this problem. Also, one of ordinary skill and creativity would fail to produce a claimed embodiment of the present invention from a knowledge of the teachings of NIEBYLSKI.

A *prima facie* case of unpatentability has thus not been made.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Double Patenting Rejection

Claims 1-16 have been rejected on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 7,393,454. This rejection is respectfully traversed.

A terminal disclaimer of U.S. Patent 7,393,454 is being filed concurrent with this paper.

Accordingly, it is respectfully requested that this double patenting rejection be withdrawn.

Charge the Terminal Disclaimer fee of $140 to our credit card.

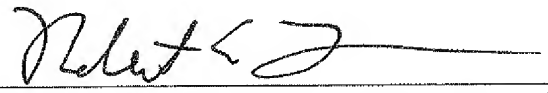
Conclusion

It is believed that the rejections have been overcome, obviated or rendered moot and no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



Robert E. Goozner, Reg. No. 42,593
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

REG/mjr/fb

APPENDIX:

The Appendix includes the following item(s):

- a new or amended Abstract of the Disclosure
- a terminal disclaimer
- a Supplemental Information Disclosure Statement